

IN THE SPECIFICATION

Please insert the following heading between lines 3 and 4 on page 1:

Field of the Invention

Please insert the following heading between lines 8 and 9 on page 1:

Discussion of Background

Please amend the paragraph at page 1, lines 22-28, as follows:

~~From~~ DE 44 39 380 A1[[,]] discloses a lubricating device for minimal quantity lubrication ~~is known~~ in which a sensor monitors the lubricant flow and records a temporal change in the lubricant flow. For example, the sensor can be a light barrier, whose detection beam penetrates the lubricant flow and [[its]] the transparently constructed supply line thereof diametrically and whose detection beam is characteristically changed by the lubricant flow. A photoreceiver generates an electric striae signal that is representative of the lubricant flow or the striae and from which the presence and quantity of the lubricant flow is derivable.

Please insert the following heading between lines 15 and 16 on page 2:

SUMMARY OF THE INVENTION

Please amend the paragraph at page 2, lines 19-21, as follows:

This object is solved by the method mentioned ~~at the beginning above~~ by means of smoothing the striae signal by calculating an average value of the striae signal over a predetermined averaging interval.

Please amend the paragraph at page 2, lines 25-27, as follows:

The method according to the invention can be further developed by a number of advantageous, mutually independent developments. These developments and the advantages connected with each of these developments are briefly discussed in the following summary.

Please amend the paragraph at page 3, lines 1-15, as follows:

The smoothed striae signal can be compared to a predetermined operating limit according to one advantageous development, wherein this predetermined operating limit is

representative ~~[[for]]~~ of an oil film that is sufficient for lubrication appropriate for operation.

If the operating limit is exceeded by the smoothened striae signal, an operating signal is output. The operating signal signals lubrication of the lubrication point that is appropriate for operation. At the same time, lubrication appropriate for operation signifies that the lubrication point is supplied with an amount of oil that is sufficient for operation suited to the use. In a roller bearing, for example, this means that the amount of oil, as calculated in the design of the roller bearing, needed to reach the guaranteed life cycle is supplied to the roller bearing. This is particularly advantageous, because the operating signal can also be used for automatic analysis, for example, by a machine control. Furthermore, if the level of the smoothened striae signal falls below the operating limit, a warning signal can be output, signalling that the lubrication point is not being lubricated in a manner appropriate for operation. The warning signal can likewise be automatically analyzed and can, for example, lead to switching off the device to be lubricated.

Please amend the paragraph at page 3, lines 16-26, as follows:

Furthermore, in an advantageous development, the smoothened striae signal can be compared to a predetermined warning limit that is representative~~[[for]]~~ of an oil film that is not sufficient for lubrication point lubrication that is appropriate for operation. If the smoothened striae signal falls below the warning limit, the warning signal is output. If the smoothened striae signal ranges between the warning limit and the operating limit, there is no change in the signal and the operating signal or the warning signal continues to be output. The advantage of this is that the reliability of the operating or warning signal is improved, because if the level falls below the operating limit by only a slight amount, the operating signal is not cancelled. Only when the smoothened striae signal also falls below the warning limit is the warning signal output, thereby cancelling the operating signal. In this way, stable operating behaviour is reached in the monitoring of the oil and gas lubricating device.

Please amend the paragraph at page 3, line 27 to page 4, line 3, as follows:

In an advantageous embodiment, the operating or warning limit can be read from a memory unit. Specification of the operating and / or warning limit is done depending on a normalization signal. The normalization signal can possibly be generated by pressing a particular combination of keys on the keyboard of an attached machine control at a time in the operation when there is lubrication that is appropriate for operation or not appropriate for operation, respectively. This has the advantage that the limits can be set very easily and in a time-saving manner. For example, a striae signal can be selected that is representative of an oil film that is satisfactory for lubrication point lubrication that is appropriate for operation and this striae signal can then be saved as the operating limit.

Please insert the following heading between lines 25 and 26 on page 7:

BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following heading between lines 13 and 14 on page 8:

DESCRIPTION OF THE PREFERRED EMBODIMENT

Please amend the Abstract at page 18 as follows: